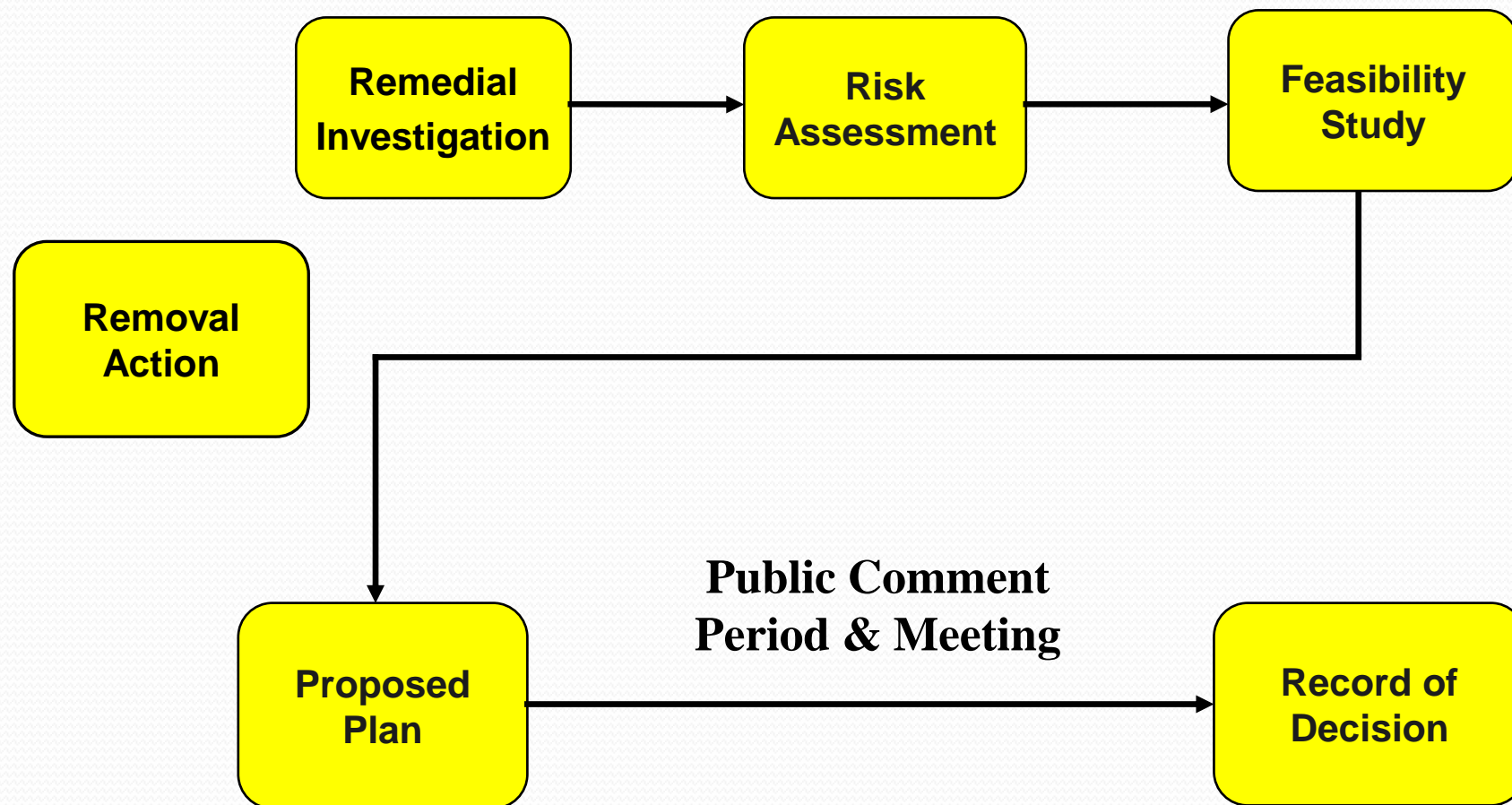


# Remedial Investigation & Feasibility Study Update

## San Jacinto River Waste Pits Superfund Site

Public Meeting  
September 22, 2011

# Superfund Process



## RI/FS Field Investigations

Work is being done by the site Potentially Responsible Parties under oversight of EPA, TCEQ, and other agencies.

### Sample/Data Collection:

- Sediment samples on the Site & background areas.
- Soil samples collected on the Site & background areas.
- Groundwater samples (shallow & deep) below impoundments.
- Tissue samples (catfish, crab, killifish & clams) on the Site & background.
- Fate & transport studies.

# San Jacinto River Waste Pits Superfund Site

River sediment samples within  
preliminary site boundary.



Waste Pits



Southern Impoundment





Soil samples within preliminary site boundary.

## Waste Pits

## Southern Impoundment



Figure 5-

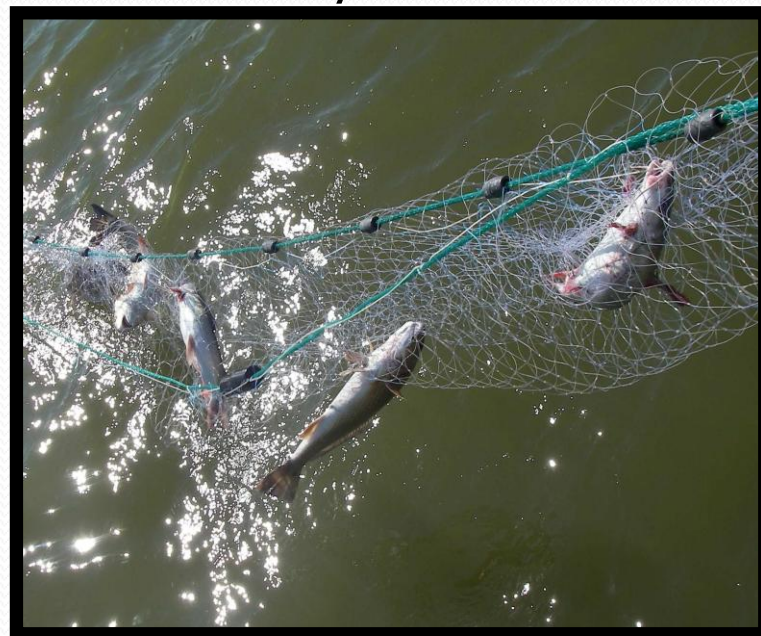
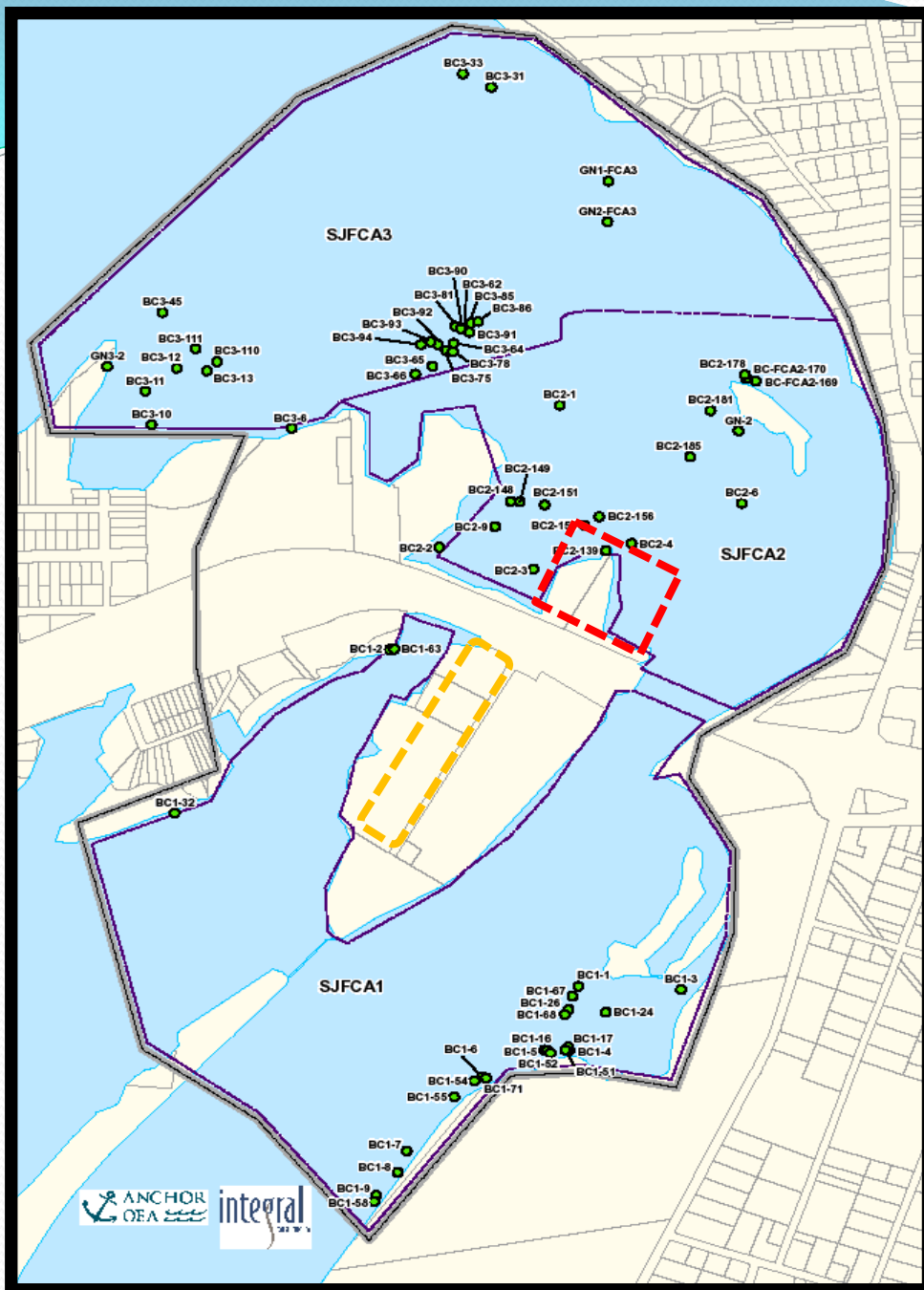
Soil Investigation Areas and Soil Sampling Location  
Within the Preliminary Site Perimeter

SJRWP Soil FS

SJRWP Superfund/MIMC and IP

# San Jacinto River Waste Pits Superfund Site

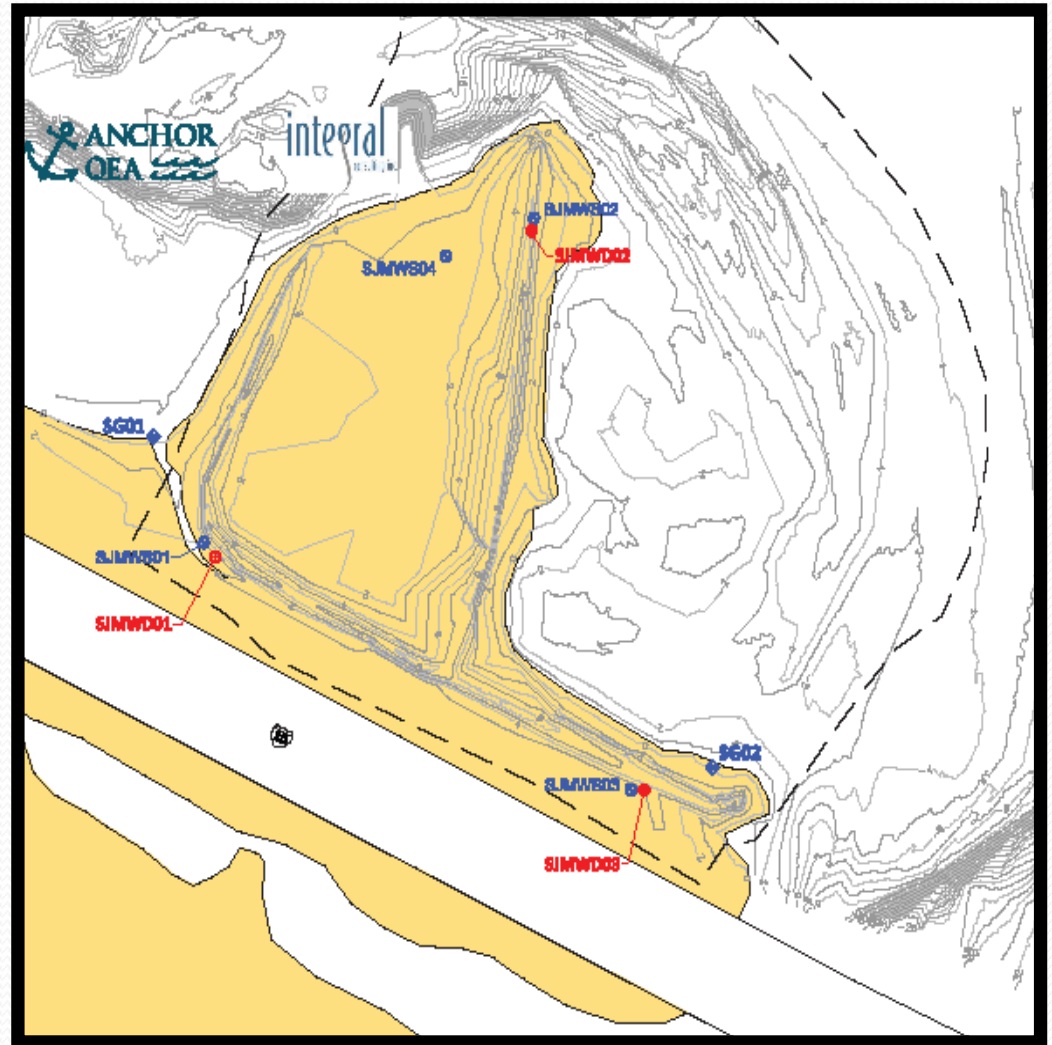
Hardhead catfish sample  
locations within preliminary  
site boundary.



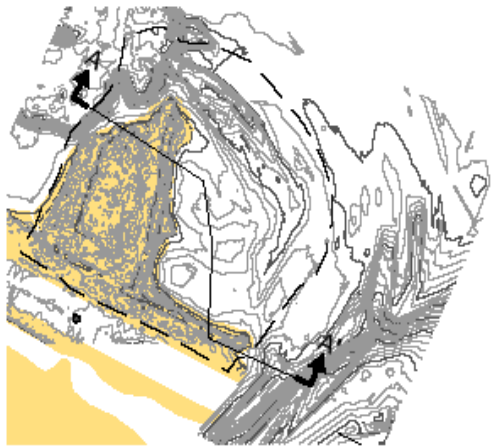
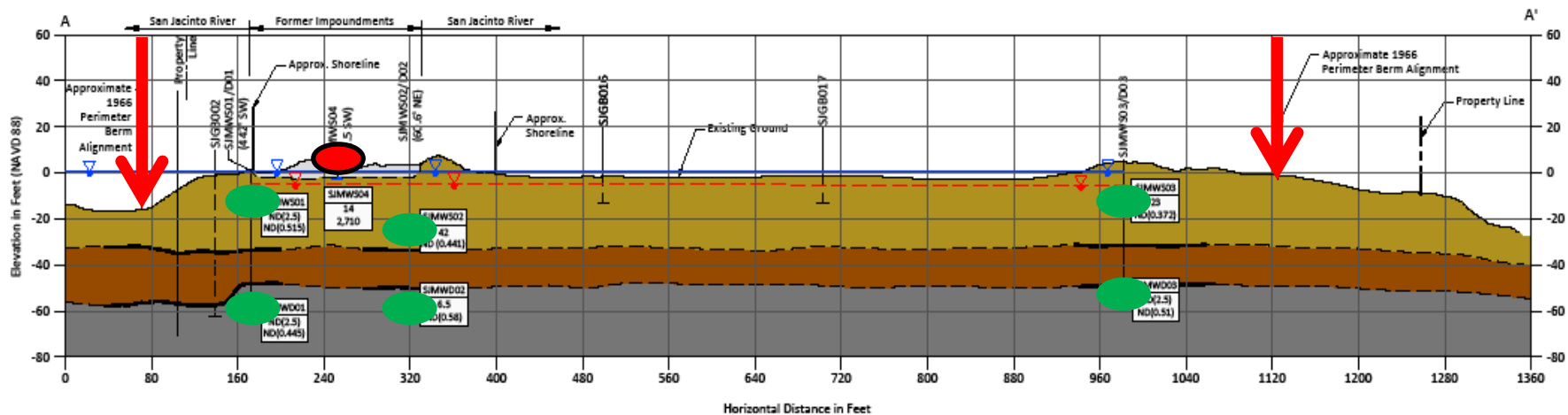


# San Jacinto River Waste Pits Superfund Site

Groundwater sample locations



# San Jacinto River Waste Pits Superfund Site Groundwater Cross-Section



**LEGEND:**



**Boring location**



### Stratigraphic Boundary



Inferred Stratigraphic Boundary

Approximate Alluvial Potentiometric Surface



### Approximate Chicot Aquifer Potentiometric Surface

Waste (Approximate)

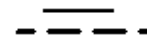
**Interbedded Recent Alluvial Sediments (Clay, Silt, Sand)**

Clay (Brown, Red-Brown-Gray, Blue-Gray) Upper Beaumont Formation

**SAND (Gray, Blue-Gray) Upper Beaumont Formation**

## Dioxin not detected in groundwater

**2710 pg/L Dioxin in water within waste material.**





## San Jacinto River Waste Pits Superfund Site

# Future Work

### Sampling/Analysis:

- Chemical fate and transport analysis.
- Additional sampling in Southern Impoundment.
- Additional background sediment and tissue sampling.

### Reports:

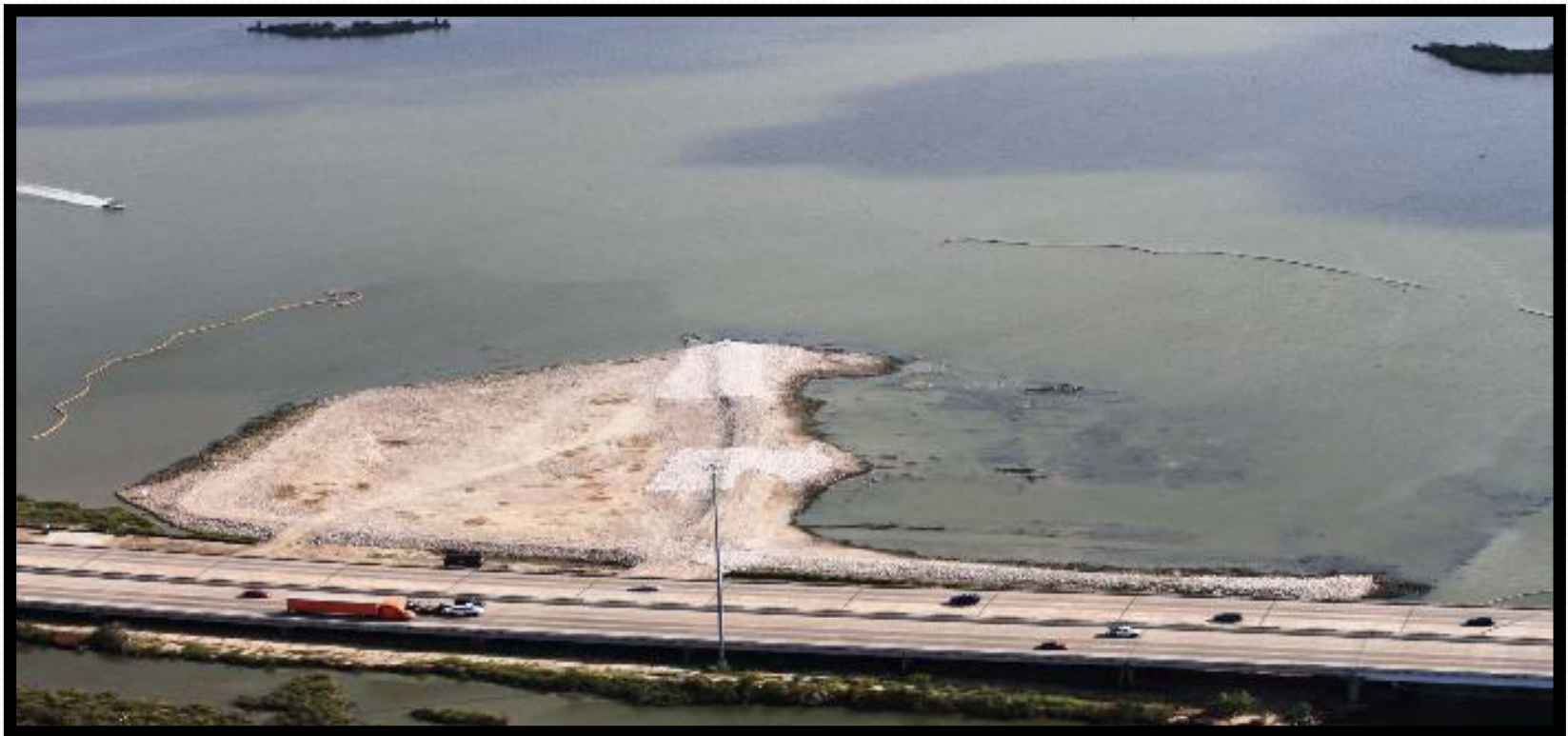
- June 2012: Baseline Ecological Risk Assessment report to be completed.
- Oct 2012: Baseline Human Health Risk Assessment report to be completed.
- Dec 2012: Remedial Investigation report to be completed.
- Aug 2013: Feasibility Study to be completed.

Record of Decision: In 2014, the “ROD” will select the final remedy for the waste pits & entire site following a public comment period & public meeting.

## San Jacinto River Waste Pits Superfund Site

# Initial Assessment of Sampling Results

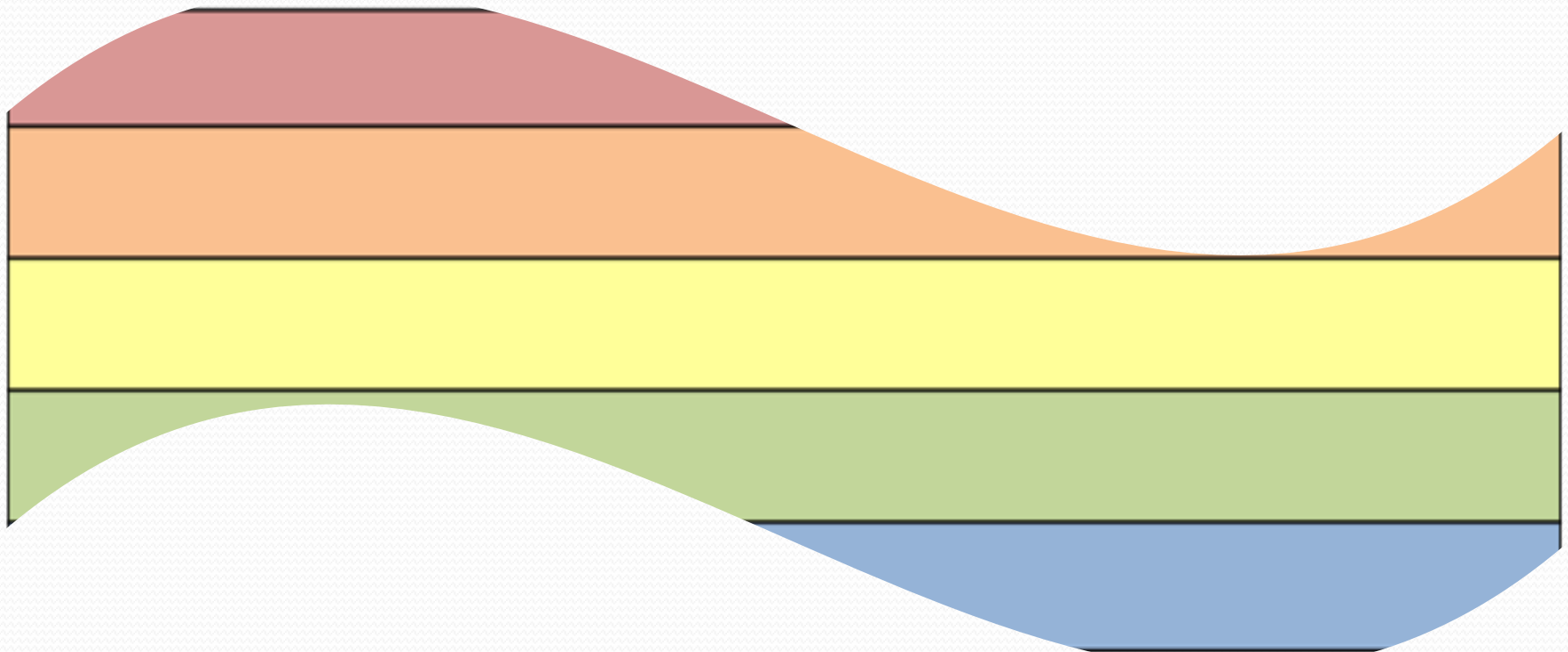
- Sediment & soil samples.
- Residential soil samples.



# San Jacinto River Waste Pits

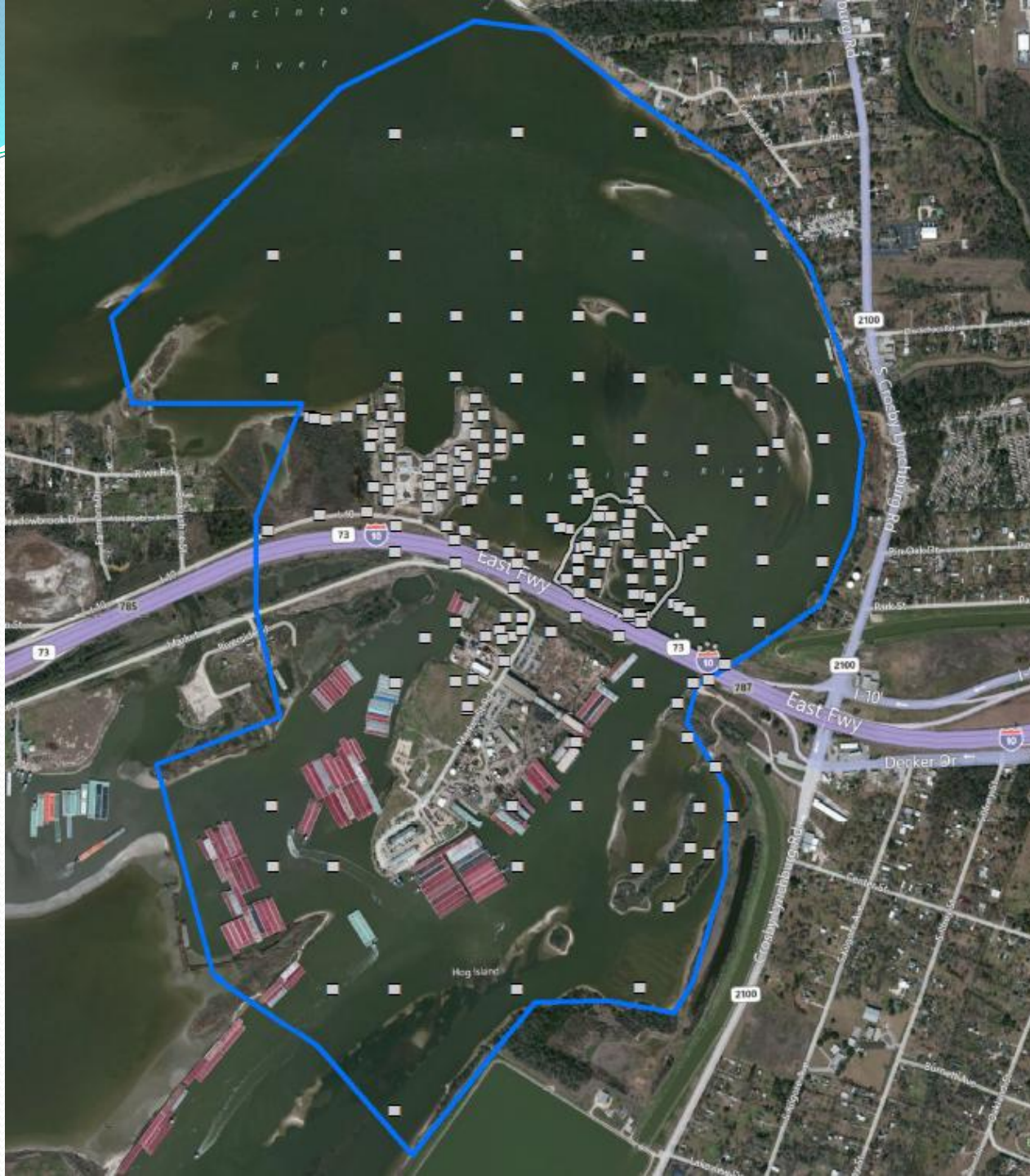
## Superfund Site

Preliminary Risk Results:  
Color-Coded

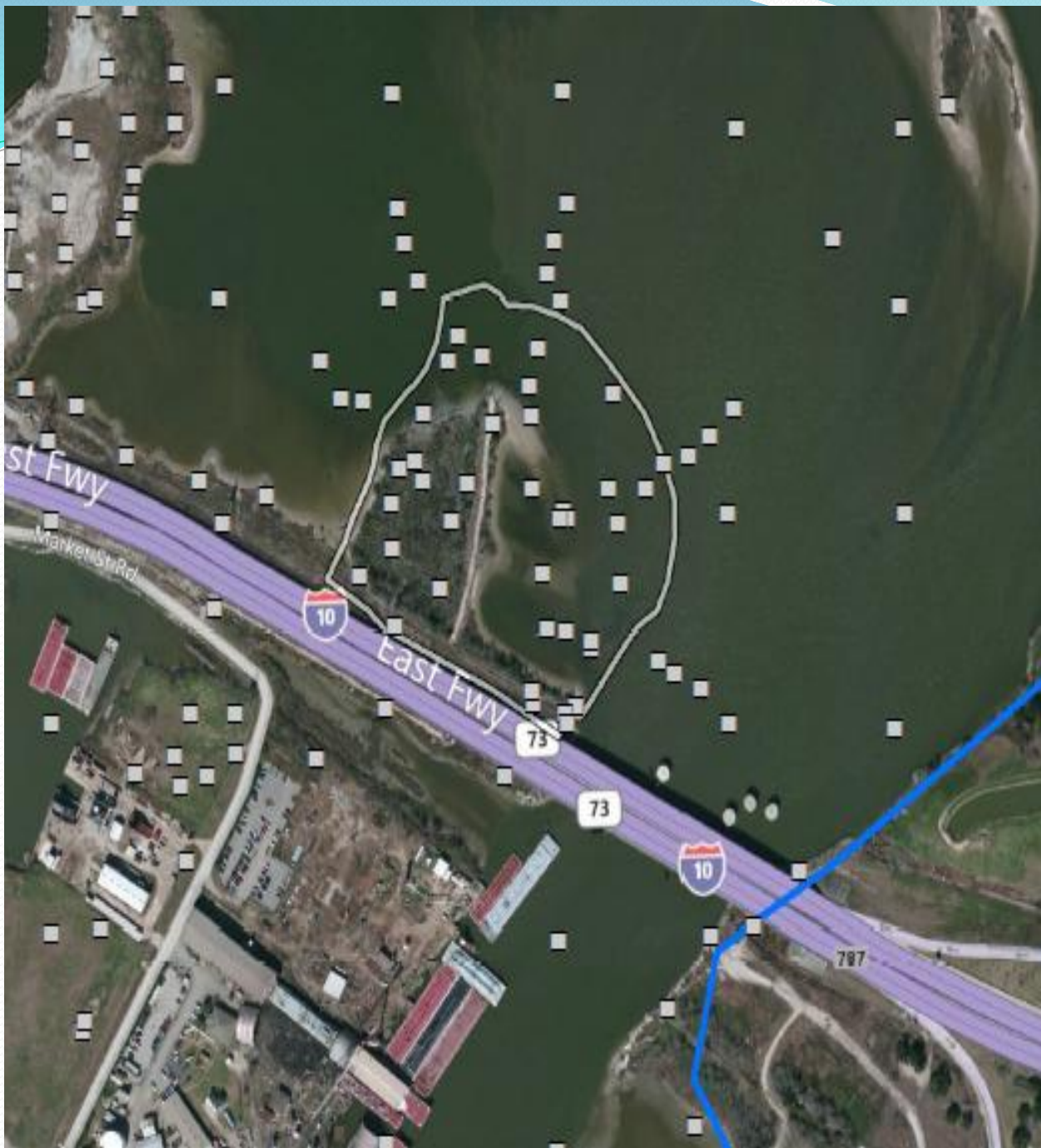




# Soil or Sediment Sampling Points



# Soil or Sediment Sampling Points in or surrounding the actual Northern Impoundments





# Preliminary color-coded risk evaluation for surface soils and surface sediments surrounding the site



**>5000 ppt TEQ**

**<5000, >665 ppt TEQ**

**≤665 ppt TEQ**







Industrial Surface Soil		
	Contact	Ingestion
>5000 ppt TEQ	Avoid any Contact with soil	Do Not Ingest Soil
<5000, >665 ppt TEQ	Contact with Soil Should Be Minimized	Accidental Ingestion of Soil Should Be Avoided
≤665 ppt TEQ	Risk of Periodic Contact with Soil within Acceptable Limits	Risk of Infrequent Accidental Ingestion of Soil within Acceptable Limits

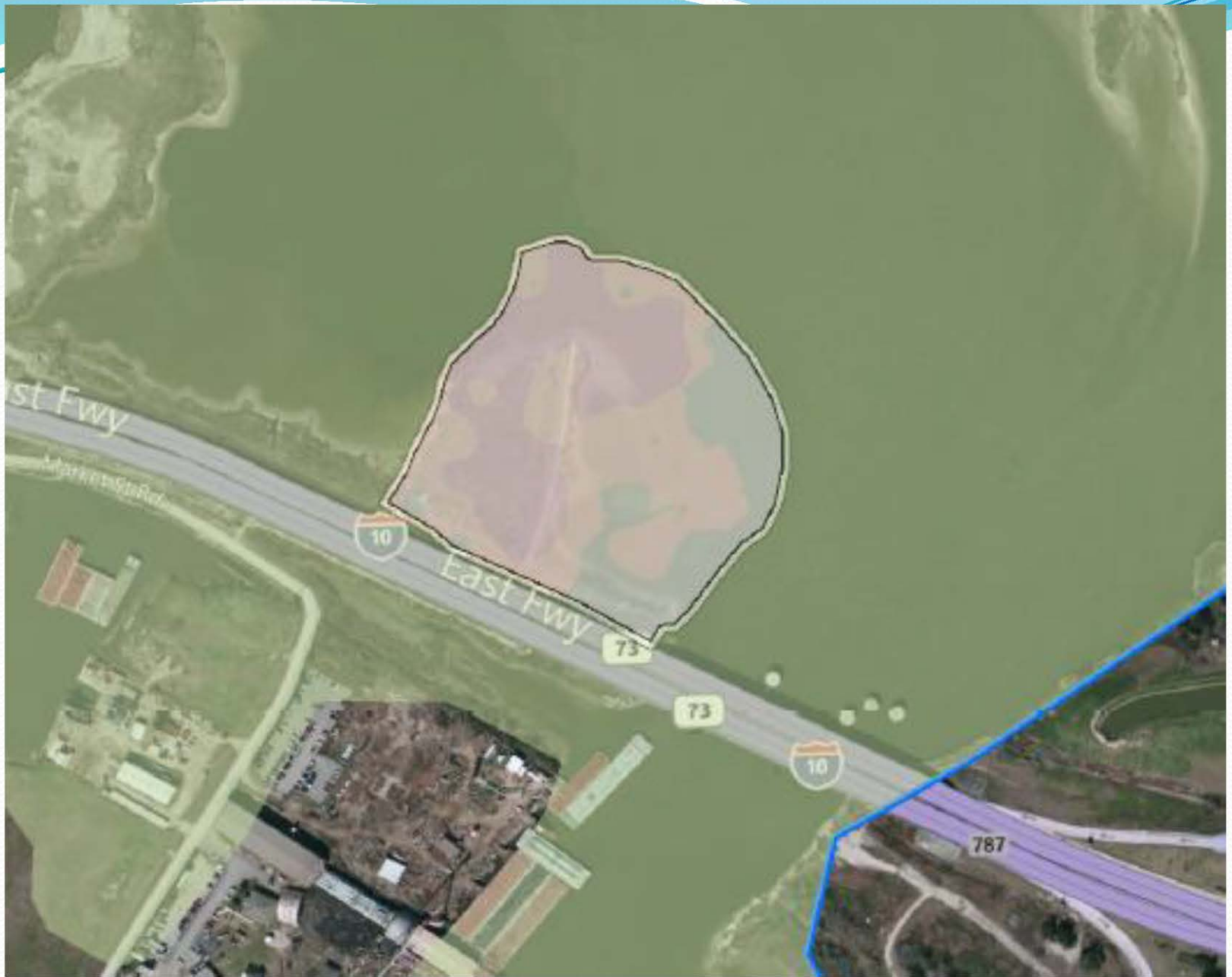


## Industrial Surface Sediment

	Contact	Ingestion	Swimming	Wading
<b>&gt;5000 ppt TEQ</b>	<b>Avoid any Contact with Sediment</b>	<b>Avoid any Accidental Ingestion of Sediment</b>	<b>Do Not Swim</b>	<b>Do Not Wade</b>
<b>&lt;5000, &gt;665 ppt TEQ</b>	<b>Contact with Sediment should be as minimized</b>	<b>Accidental Ingestion of Sediment should be avoided</b>	<b>Avoid Swimming</b>	<b>Avoid Wading</b>
<b>≤665 ppt TEQ</b>	<b>Brief Periods of Contact with Sediment (with reasonable hygiene) within Acceptable Limits</b>	<b>Risk of Infrequent Accidental Ingestion of Sediment within Acceptable Limits</b>	<b>Risk of Infrequent Swimming (with reasonable hygiene) within Acceptable Limits</b>	<b>Risk of Infrequent Wading (with reasonable hygiene) within Acceptable Limits</b>

# Adhere to all posted Fish Advisories







>1000 ppt TEQ

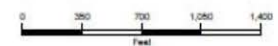
<1000, >50 ppt TEQ

≤50 ppt TEQ

## San Jacinto River Waste Pits

August 2011 Residential Soil  
Samples for Dioxin  
and Furan Analysis

- Sample Location
- Zero Ft. Contour
- Northern Impoundment
- Southern Impoundment
- 100 Yr. Floodplain



Sources:  
Sample Locations: Anchor QEA  
Zero Ft. Contour: Anchor QEA  
Impoundment Perimeters: EPA Region 6  
100 Yr. Floodplain: Anchor QEA  
Background Roads: ESRI Streetmap

EPA makes no claims as to the  
accuracy of the data or its suitability  
for any particular use.

Map created: September 19, 2011



EPA Region 6  
Superfund Division  
Dallas, Texas  
20110919B/C01



Residential Surface Soil		
	Contact	Ingestion
>1000 ppt	Avoid any Contact with soil	Do Not Ingest Soil
<1000, >50ppt TEQ	Contact with soil should be minimized	Accidental Ingestion of soil should be avoided
<50 ppt TEQ	Risk of Periodic Contact with Soil (with reasonable hygiene) within Acceptable Limits	Risk of Infrequent Accidental Ingestion of Soil within Acceptable Limits

# San Jacinto River Waste Pits Superfund Site

## For More Information

### U.S. EPA

**Gary Miller**  
**Superfund Remedial Project Manager**  
214.665.8318 or 1.800.533.3508 (toll-free)

**Valmichael Leos**  
**Superfund On-Scene Coordinator**  
214.665.2283 or 1.800.533.3508 (toll-free)

**Stephen Tzhone**  
**Superfund Remedial Project Manager**  
214.665.8409 or 1.800.533.3508 (toll-free)

**Donn Walters**  
**Superfund Sr. Community Involvement  
Coordinator / Public Liaison**  
214.665.6483 or 1.800.533.3508 (toll-free)

### Texas Commission on Environmental Quality

**Luda Voskov**  
**Project Manager, Superfund Section**  
512.239.6368

**Crystal Taylor**  
**Community Relations, Superfund Section**  
512.239.3844

**Site Repository**  
Highlands Public Library, Stratford Branch  
509 Stratford Street, Highlands Texas

### San Jacinto Waste Pits Superfund Site on the Internet

[www.sanjacintowastepits.com](http://www.sanjacintowastepits.com) or  
[www.epa.gov/region6/6sf/pdf/files/0606611.pdf](http://www.epa.gov/region6/6sf/pdf/files/0606611.pdf)